

An etching mask is made of a metal such as Permalloy (NiFe) and has a T-shaped cross section made up of a vertical bar having width W_1 and a lateral bar having width W_2 . Through ion beam etching with the etching mask, the region in the surface of a workpiece not covered with the mask is selectively removed by the ion beams applied thereto. In the mask the vertical bar has a region obstructed by the lateral bar and a redeposit portion. As a result, the region of the vertical bar near the interface between the workpiece and the vertical bar that substantially determines the pattern width does not change in width. Consequently, a pattern of the workpiece on which etching has been performed has the top width and bottom width substantially equal to width W_1 of the vertical bar of the mask. The pattern is rectangular in cross section.